

OBJECTIVES: In the Survival of Myocardial Infarction Long-term Evaluation 4 Study (SMILE-4) zofenopril (Z) associated with acetylsalicylic acid (ASA) was superior to ramipril (R) plus ASA in reducing the occurrence of major cardiovascular events, in patients with left ventricular dysfunction (LVD) following acute myocardial infarction (AMI). The present post-hoc analysis was performed to evaluate cost-effectiveness of Z compared to R. **METHODS:** A total of 771 patients with LVD and AMI were randomized, double-blind to Z 60 mg/day (n=389) or R 10 mg/day (n=382) plus ASA 100 mg/day and followed-up for 1 year. The primary study end-point was 1-year combined occurrence of death or hospitalization for cardiovascular causes. The economic analysis was based on the evaluation of cost of medications and hospitalizations and was applied to the intention-to-treat population (n=716). Cost data were drawn from the database of the Italian National Health Service. The incremental cost-effectiveness ratio (ICER) was used to quantify the cost per event prevented with Z versus R. **RESULTS:** Z significantly (p=0.028) reduced the risk of the primary study end-point by 30% as compared to ramipril (95% confidence interval: 49%, 4%). The number needed to treat to prevent a major cardiovascular event with Z was 13 less than with R. The cost of drug therapies was higher with Z (€313.90 per patient per year, n=365) than with R (€160.60 per patient per year, n=351). The cost related to the occurrence of major cardiovascular events requiring hospitalization, averaged €3195.47 for Z and €3071.37 for R. The ICER of Z versus R was €1990.88 per event prevented. **CONCLUSIONS:** Z is a viable and cost-effective treatment for managing patients with LVD after AMI.

PCV86

COST EFFECTIVENESS ANALYSIS OF TICAGRELOR IN THE TREATMENT OF PATIENTS WITH ACUTE CORONARY SYNDROME IN MEXICO: OUTCOMES FOR SPECIFIC GROUPS

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OBJECTIVES: To demonstrate the cost-effectiveness (CE) of ticagrelor in the treatment of Acute Coronary Syndrome (ACS) in specific population: invasive, Unstable Angina (UA), ST-elevation myocardial infarction (STEMI), non-STEMI (NSTEMI), and with or without diabetes. **METHODS:** Analysis of ticagrelor+acetylsalicylic acid (ASA) and clopidogrel/ASA as fixed dose combination (FDC) was made using results of PLATO study and its sub-studies. A Markov model was developed to evaluate each specific population at a time horizon of 14 years from an institutional perspective in Mexico. Life years gained (LY) was the outcome measure. An incremental cost-effectiveness ratio (ICER) was performed. Direct health care costs were used and a 5% discount rate was applied. A Sensitivity Analysis (SA) and Cost Effectiveness Acceptability Curve (CEAC) were performed. **RESULTS:** The ICERs of Ticagrelor+ASA versus clopidogrel/ASA for each specific population were: \$4,647 for UA; \$4,024 for Non-STEMI; \$4,128 for STEMI; \$4,607 for Invasive-treatment and \$4,672 for population without Diabetes. The best results are shown in the Diabetes groups with ICER \$3,011. The results of SA were consistent with the base case. The likelihood of Ticagrelor+ASA to be cost-effective is 100% under the willingness-to-pay threshold in Mexico of one PIB per-capita (\$10,064). **CONCLUSIONS:** Ticagrelor+ASA was CE compared with clopidogrel/ASA in all specific groups, especially in diabetes and NSTEMI patients. Therefore it could be considered as the first option for treating these patients in an institutional setting.

PCV87

COST-EFFECTIVENESS OF NEWER ANTICOAGULANTS FOR STROKE PREVENTION IN ATRIAL FIBRILLATION: A SYSTEMATIC LITERATURE REVIEW

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OBJECTIVES: To conduct a systematic review of economic models of newer anticoagulants for stroke prevention in atrial fibrillation (SPAF). **METHODS:** We searched Medline, Embase, NHSEED and HTA databases and the Tuft's Registry through October 10, 2012. Included models were cost-effectiveness analyses of newer agents for SPAF using a Markov or discrete event simulation model and published in English. **RESULTS:** Eighteen models were identified. Each was based on a lone randomized trial per new agent, and these trials were clinically and methodologically heterogeneous. Dabigatran 150mg, 110mg and sequential dosing were assessed in 9, 8, and 9 models, rivaroxaban in 4 and apixaban in 4. Warfarin was a first-line comparator in 94% of models. Models were conducted from the United States (44%), European countries (39%) and Canadian (17%) perspectives. In base-case analyses, patients typically were at moderate-risk of stroke, initiated anticoagulation at 65-73 years of age, and were followed for/near a lifetime. All models reported cost/quality-adjusted life-year, and while 22% reported using a societal perspective, no model included indirect costs. Four models reported an incremental cost-effectiveness ratio (ICER) for a newer anticoagulant (dabigatran 110mg (n=4)/150mg (n=2); rivaroxaban (n=1)) versus warfarin above commonly reported willingness-to-pay thresholds. ICERs (2012US\$) versus warfarin ranged from \$3,547-\$86,000 for dabigatran 150mg, \$20,713-\$150,000 for dabigatran 110mg, \$4,084-\$21,466 for sequentially-dosed dabigatran and \$23,065-\$57,470 for rivaroxaban. Apixaban was demonstrated to be economically-dominant compared to aspirin, and dominant or cost-effective (\$11,400-\$25,059) versus warfarin. Based on indirect comparisons, 3 models compared the cost-effectiveness of new agents and reported conflicting results. **CONCLUSIONS:** Cost-effectiveness models of newer anticoagulants for SPAF have been extensively published. They frequently found newer anticoagulants to be cost-effective, but due to the lack of head-to-head trials and the heterogeneity in clinical characteristic of underlying trials and modeling methods, it is currently unclear which of these newer agents is most cost-effective.

PCV88

CLINICAL EFFECTIVENESS AND COST-EFFECTIVENESS OF RENAL DENERVATION FOR RESISTANT HYPERTENSION

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OBJECTIVES: To assess the clinical effectiveness and cost-effectiveness of renal denervation (RDN) in resistant hypertensive patients. **METHODS:** Two reviewers independently screened titles and abstracts for eligibility. Studies eligible for inclusion in the systematic review of cost-effectiveness were full cost-effectiveness analyses, cost-utility analyses, cost-benefit analyses and cost-consequence analyses. One reviewer performed data extraction, which was checked by two reviewers independently. Two reviewers independently applied quality assessment criteria and differences in opinion were resolved at each stage. Studies were synthesized through a narrative review with full tabulation of the results of all included studies. Robustness and uncertainty were evaluated using deterministic and probabilistic sensitivity analyses. **RESULTS:** RDN substantially reduced event probabilities. Median survival increased for RDN compared to standard of care. RDN was cost-effective in comparison to standard of care in the reviewed published estimates of cost-effectiveness. These estimates can not be directly extrapolated to other settings due to potential variations in cost structures and different treatment patterns among countries that may influence final results. Findings were relatively insensitive to variations in input parameters except for systolic blood pressure reduction, baseline systolic blood pressure, and effect duration. Renal denervation gave improved outcomes. **CONCLUSIONS:** RDN appears to be a clinically effective and cost-effective intervention in resistant hypertensive patients compared with standard of care. Literature review suggests that RDN, over a wide range of assumptions, is a cost-effective strategy for resistant hypertension that might result in lower cardiovascular morbidity and mortality. Uncertainties remain and further research in Kazakhstan is required to provide detailed data on patient QoL and cost effectiveness in the local setting.

PCV89

COST EFFECTIVENESS ANALYSIS OF ROSUVASTATIN 5MG IN THE TREATMENT OF ADULT PATIENTS WITH HYPERCHOLESTEROLEMIA IN MEXICO

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OBJECTIVES: To demonstrate the cost-effectiveness of rosuvastatin 5mg in the treatment of adult patients with hypercholesterolemia in Mexico, from the institutional perspective. **METHODS:** A Markov model was developed in three age groups: 45-55, 56-65 and 66-75, at two time horizons: 20 years and lifetime. Comparators were: atorvastatin 20mg, pravastatin 10mg and simvastatin 20mg. The measure of efficacy was based on the Blassetto; and STELLAR; studies, while patient characteristics were adapted to Mexican population. The outcome measure was life years gained (LY); direct health care costs were used and express in US dollars; a 5% discount rate was applied; the estimated mean costs and LY were calculated and the results were presented as incremental cost-effectiveness ratios (ICERs). Sensitivity analyses were performed. **RESULTS:** In lifetime and in 20 years horizon simvastatin and atorvastatin were dominated by rosuvastatin 5mg that had ICERs below the willingness-to-pay threshold in Mexico of 1 PIB per-capita (\$10,064). The sensitivity analysis showed consistency. Incremental LY for rosuvastatin 5mg vs pravastatin 10mg were 0.281; 0.282 and 0.234 for the 3 groups of age respectively. Incremental costs were \$406.60; \$251.87 and 101.72 with ICERs of \$1,447.44; \$893.00 and \$434.72 respectively. **CONCLUSIONS:** Rosuvastatin 5mg showed extensive dominance over simvastatin and atorvastatin. It is also cost-effectiveness compared with pravastatin with ICERs below the willingness-to-pay threshold of one PIB per capita. The use of rosuvastatin 5mg in the treatment of Mexican patients with hypercholesterolemia in different groups of age for 20 years and life time horizons is cost-effective, particularly in the 56-65 and 66-75 groups with very low ICERs.

PCV90

THE COST-EFFECTIVENESS OF RIVAROXABAN COMPARED TO ENOXAPARIN PLUS ADJUSTED-DOSE WARFARIN FOR THE TREATMENT OF DEEP VEIN THROMBOSIS (DVT) IN TURKEY

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OBJECTIVES: To evaluate the cost-effectiveness of rivaroxaban versus o enoxaparin+warfarin in the treatment of DVT. **METHODS:** A Markov model simulating the progression of DVT in the course of three month cycles, up to death, was adapted to Turkish setting. The health states included the events related with recurrent DVT and bleeding. The model provides the comparison of six-month treatment with rivaroxaban against enoxaparin+warfarin. Event rates and the treatment effects of rivaroxaban were derived from EINSTEIN DVT clinical trial. Time horizons studied were 5 years and life-time. Utility values were based on the published literature. Local 2012 prices were used as source of the costs. The incremental cost-effectiveness ratios (ICER) were calculated with life-years (LYs) and quality-adjusted LYs (QALYs) gained. One-way sensitivity analyses were undertaken to examine the effects of model drivers. The analysis was undertaken from a payer perspective. Discount rate was set at 3.5% for both costs and outcomes. Mid-2012 USD currency rate was used. Willingness-to-pay (WTP) threshold was set as twice the local gross domestic product per capita